



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

May 10, 1991

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

Ms. Deborah Talanian
Manager, Marketing and Customer Service
Entropy Limited
South Great Road
Lincoln, MA 01773

Dear Ms. Talanian:

This responds to your request of April 16, 1991 for confirmation that a statistical inventory reconciliation method (SIR) can be used to comply with the Environmental Protection Agency's requirements for release detection on underground storage tanks (UST), including associated piping.

It is my understanding that SIR methods (like Entropy's) compare tank volume inputs to outputs and evaluate several months of data to determine if there exists any statistically-significant discrepancies (including leaks). Because this analysis must include the use of the metered product dispensing records, it is generally a "tank systems" test that should also detect leaks from the piping system. Thus, if properly performed for any particular site, an SIR method that demonstrates a general performance under the EPA protocols to the standards in the rules may be an acceptable alternative to periodic line tightness testing. I must offer two caveats, however.

First, I have some doubt SIR methods can be shown to be a substitute for monthly monitoring because the detection results must be updated and available on a month to month basis should an inspector come by and visit the site. Of course it may be an acceptable equivalent to the daily inventory/periodic tightness test method allowed in the rules, as long as the owner and operator maintains on-site the last year's worth of daily inventory records reconciled for the latest month.

Second, UST systems with pressurized lines must still have catastrophic line leak detectors able to detect a 3 gpa leak at 10 psi. Inventory control is not an effective substitute for such emergency shut-off, restricting, or alarming equipment.

I hope the above information is complete and helpful to you. Thank you for your patience in awaiting my response.

Sincerely,

/s/

Dave O'Brien, chief
Technical Standards Branch
Office of Underground Storage Tanks

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